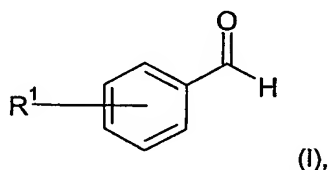


- 12 -

Claims:

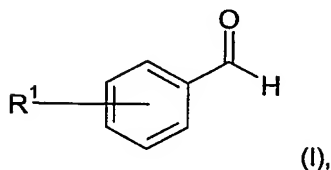
1. A fibre composite impregnated with a curable, solvent-free epoxy resin matrix, comprising
- (a) a liquid epoxy resin or a liquid mixture of epoxy resins,
 - (b) a compound obtainable by reacting a benzaldehyde of the formula I



- in which R¹ is hydrogen, hydroxyl, C₁-C₅alkyl or C₁-C₅alkoxy with a primary amine, and as curing agent a mixture composed of
- (c) an aliphatic or cycloaliphatic primary monoamine and/or dissecondary diamine and
 - (d) a catalytically curing tertiary amine,
- the curable epoxy resin matrix containing from 0.15 to 0.8 amine hydrogen equivalent of the amine component (c) and from 0.01 to 0.1 mol of the tertiary amine (d) per epoxide equivalent of the epoxy resin (a).
2. Fibre composite according to Claim 1, containing from 0.3 to 20% by weight, more preferably from 0.3 to 8% by weight, based on components (a), (c) and (d), of the benzylidenamine component (b).
3. Fibre composite according to Claim 1, containing from 0.2 to 0.7 amine hydrogen equivalent of the amine component (c) and from 0.02 to 0.06 mol of the tertiary amine (d) per epoxide equivalent.
4. Fibre composite according to Claim 1, comprising as component (c) a primary monoamine.
5. Fibre composite according to Claim 1, comprising as component (b) benzylidenebenzylamine.
6. Fibre composite system, in particular a fibre composite laminate, produced from the fibre composite according to Claim 1 together where appropriate with other materials, with shaping and crosslinking of the resin matrix.

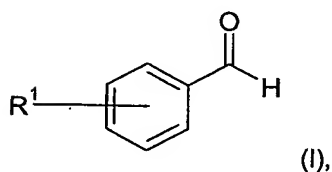
- 13 -

7. Use of a compound obtainable by reacting a benzaldehyde of the formula I



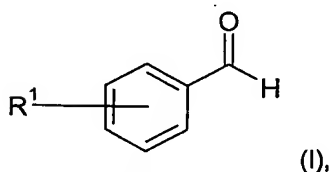
in which R¹ is hydrogen, hydroxyl, C₁-C₅alkyl or C₁-C₅alkoxy with a primary amine, preferably benzylidenebenzylamine, for improving the properties of a fibre composite comprising an epoxy resin and as curing agent a mixture composed of an aliphatic or cycloaliphatic primary monoamine and/or dissecondary diamine and a catalytically curing tertiary amine.

8. Use according to Claim 6, characterized in that based on the total amount of epoxy resin and curing agent from 0.3 to 20% by weight, more preferably from 0.3 to 8% by weight, of a compound obtainable by reacting a benzaldehyde of the formula I



in which R¹ is hydrogen, hydroxyl, C₁-C₅alkyl or C₁-C₅alkoxy with a primary amine is used.

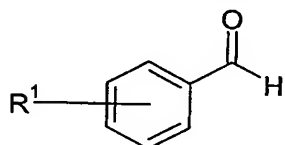
9. Epoxy resin matrix comprising a liquid epoxy resin or a liquid mixture of epoxy resins, a compound obtainable by reacting a benzaldehyde of the formula I



in which R¹ is hydrogen, hydroxyl, C₁-C₅alkyl or C₁-C₅alkoxy with a primary amine, preferably benzylidenebenzylamine, and as curing agent a mixture composed of an aliphatic or cycloaliphatic primary monoamine and/or dissecondary diamine and a catalytically curing tertiary amine.

- 14 -

10. Epoxy resin matrix according to Claim 9, containing, based on the total amount of epoxy resin and curing agent, from 0.3 to 20% by weight, more preferably from 0.3 to 8% by weight, of a compound obtainable by reacting a benzaldehyde of the formula I



(I),

in which R¹ is hydrogen, hydroxyl, C₁-C₅alkyl or C₁-C₅alkoxy with a primary amine.